

Abstract of the Invention

A seal on a movable top or bottom plate for use in a chromatography column. The plate is formed of a flow distributor connected to one or more movement rods that control the movement of the top plate within a chromatography column. The plate is formed of two pieces, a flow distributor and a seal plate. The seal plate is mounted on top of the flow distributor and has a seal that is essentially co-terminal with the outer edge of the flow distributor. The seal plate is attached to the flow distributor by one or more pins or threaded bolts and forms a space between them. The one or more pins contain one or more compression means for biasing the seal plate against the flow distributor. An opening is formed in the seal plate for the selective introduction of a pressurized energy source such as compressed air, gas or hydraulic fluid into the space to overcome the compression means. One or more seals are arranged between the seal plate and distributor to maintain the pressurized energy source between the two of them. Optionally the space may contain a closed bladder or reservoir connected to the opening to contain the pressurized energy source.